

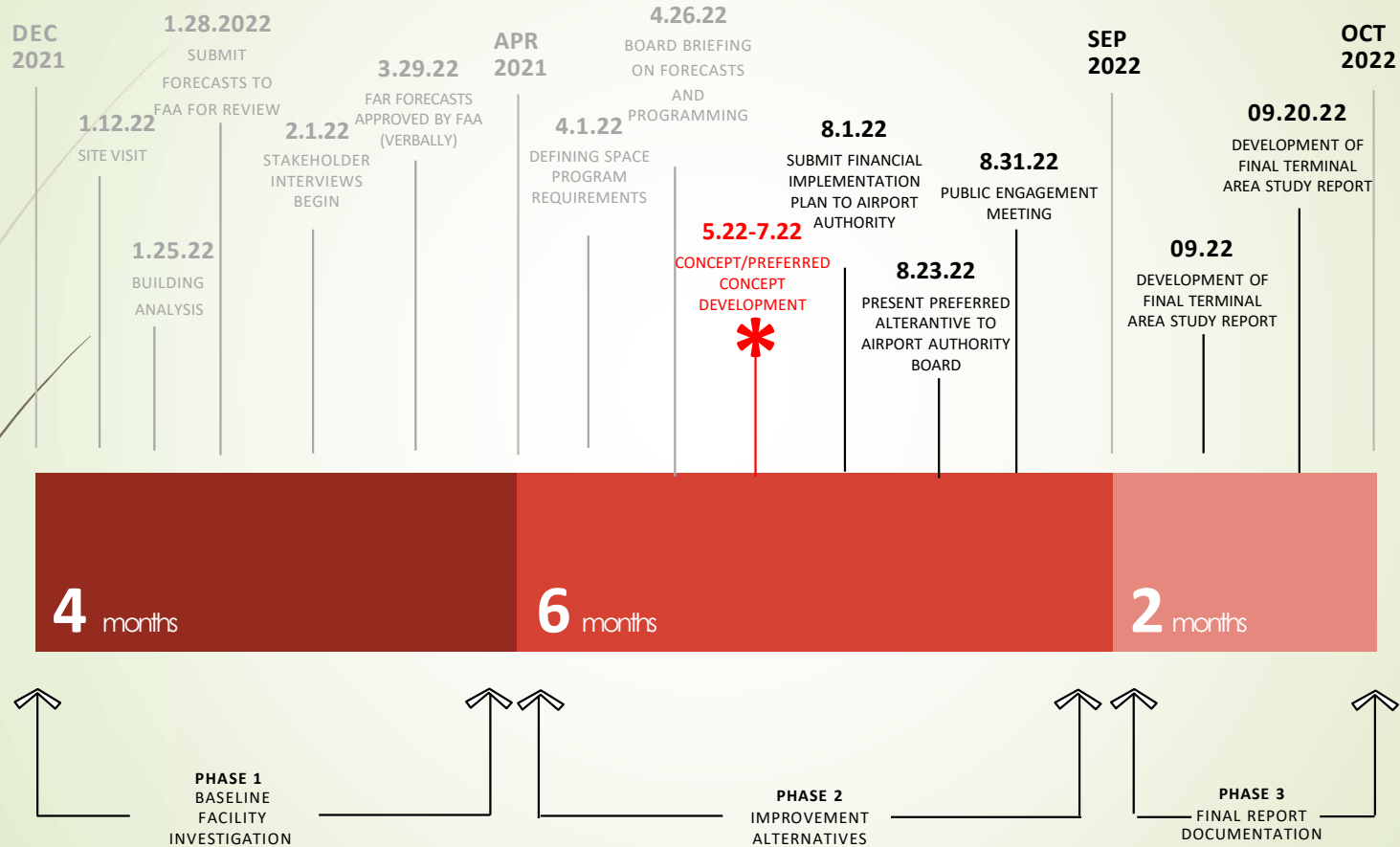


Terminal Area Study – Improvement Alternatives

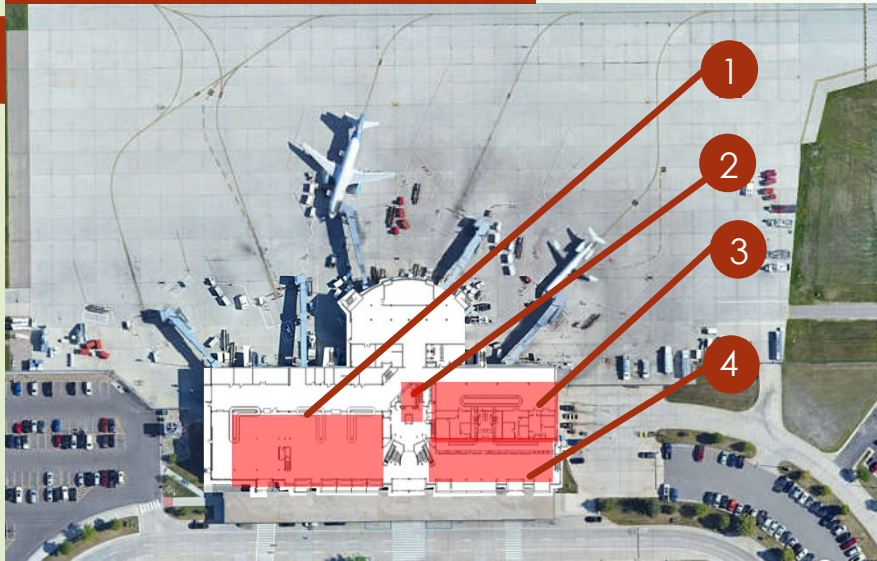
MAA Briefing

June 28, 2022

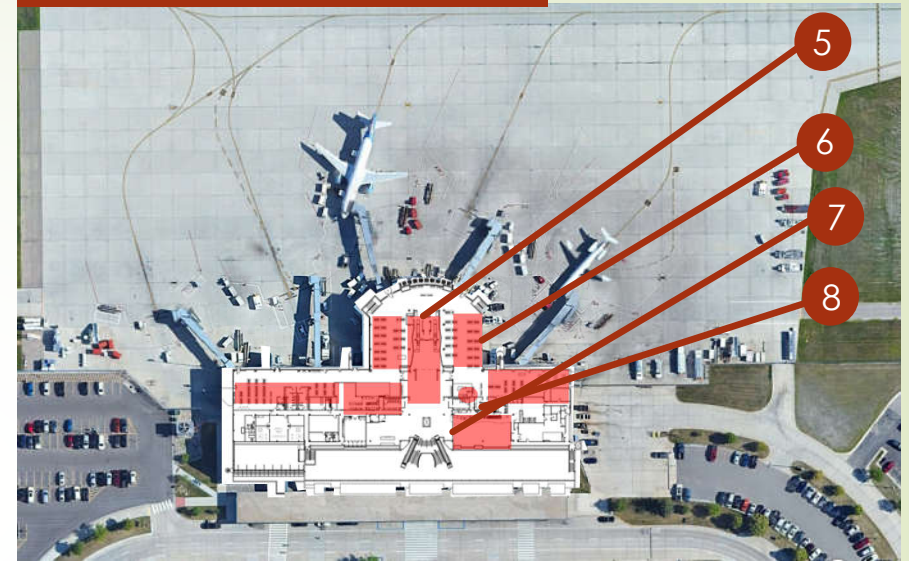
SCHEDULE | FAR TERMINAL AREA STUDY



Lower-Level Plan



Upper-Level Plan

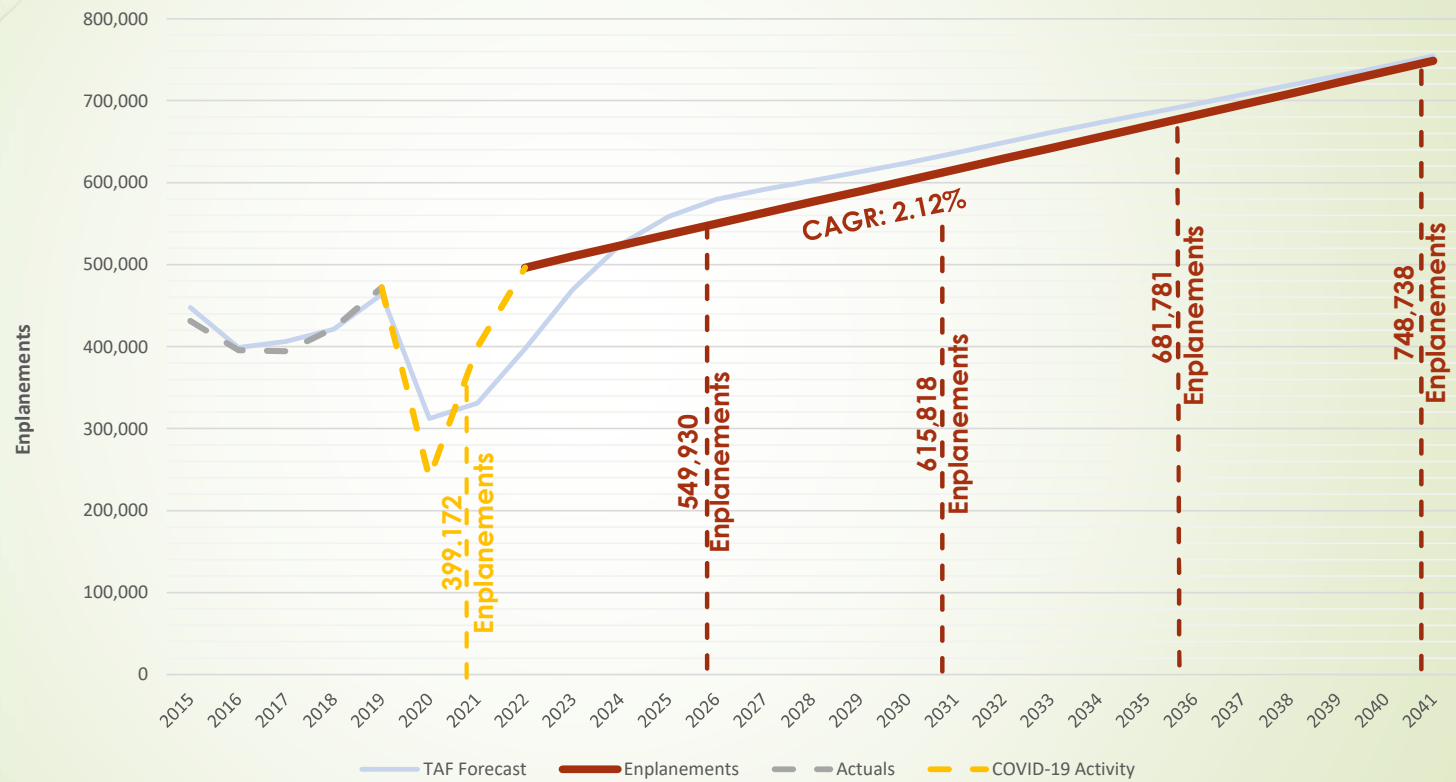


Planning Considerations

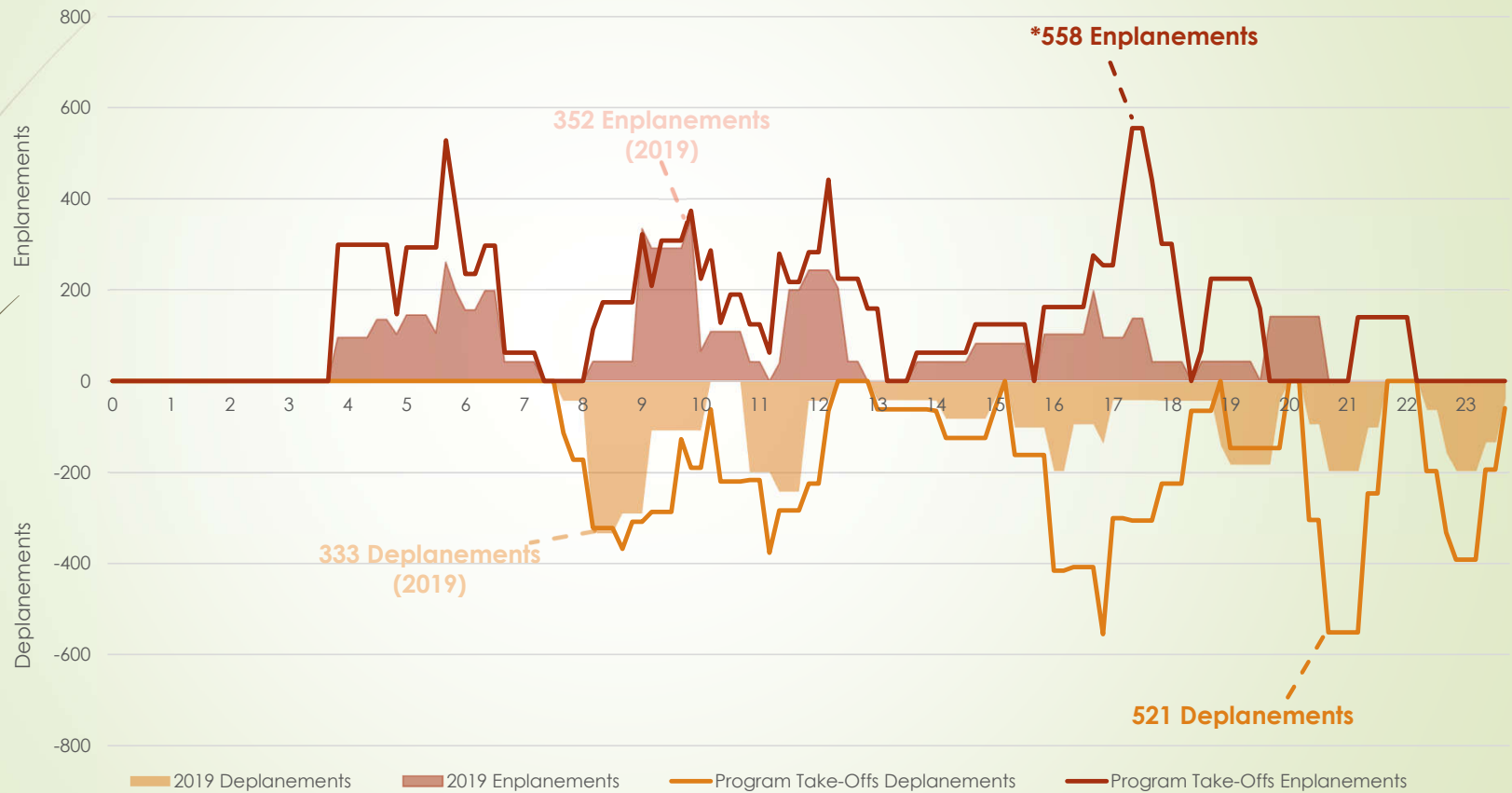
- 1 Baggage claim and rental car counter circulation undersized
- 2 Pre-security restroom locations are not visible to passengers.
- 3 Baggage screening and outbound baggage requires expansion to meet demand
- 4 Ticket queuing area and ticket counter space stressed during peak times

- 5 Security screening location and size present safety and operational inefficiencies
- 6 Departure lounges undersized
- 7 Concession locations and size impact airport revenue
- 8 Post-security restrooms size and location require evaluation due to overcrowdedness.

Enplanement Forecasts



Peak Hour Forecasts

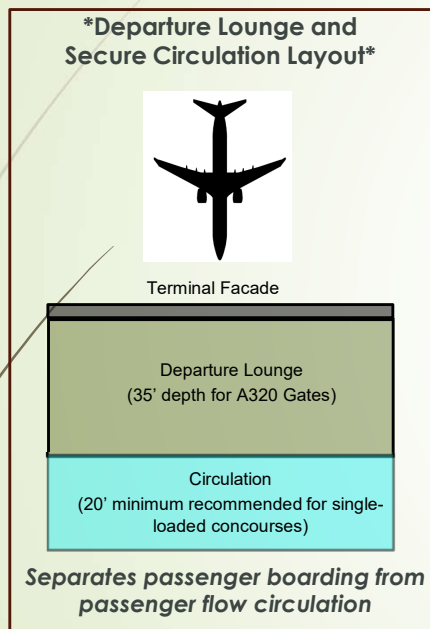


* The time of day which peaking occurs at FAR vary throughout the year. The time of day of the peak hour in the spring may vary from the time of day of the peak hour in the summer, however, the number of enplanements/deplanements should be around the same.

FAR Terminal Area Program

FAR Demand Comparison	2019			Program Take-Off Requirements	
	Existing	Recommended	Capacity Threshold	2041	Capacity Threshold
General					
Annual Enplanements		472,157		748,738	
Peak Hour Enplanements		352		558	
Aircraft Gates/PBB (# of Gates)	5	8	✗	8+1 RON	✗
Public Space					
Circulation (public seating, ticketing, concourse, bag claim, general circ.) (SF)	26,138	27,748	✗	32,945	✗
Ticket Lobby Queue (SF)	2,469	3,108	✗	5,740	✗
Passenger Security Screening (SF)	4,163	5,300	✗	6,800	✗
Departure Lounges (SF)	8,564	15,671	✗	25,073	✗
Restrooms (pre/post security) (SF)	2,876	3,150	✗	4,200	✗
Other (Service Animal Relief Area, Mother Nursing Station, Janitor Closet) (SF)	340	515	✗	760	✗
Airline Space					
Ticketing (counter, ATO) (SF)	4,978	6,080	✗	6,893	✗
Outbound Baggage Screening (SF)	1,088	2,175	✗	3,225	✗
Outbound Baggage Makeup (SF)	4,251	11,880	✗	12,100	✗
Inbound Baggage Makeup (SF)	2,398	3,700	✗	5,600	✗
Baggage Claim Devices (SF)	7,521	4,600	✓	6,900	✓
Baggage Service Offices (SF)	0	400	✗	560	✗
Concessions					
Pre-Security Food/Retail (SF)	5,318	1,075	✓	2,350	✓
Post-Security Food/Retail (SF)	2,305	3,225	✗	7,050	✗
Support and Storage (SF)	2,099	1,005	✓	1,300	✓
Rental Car Offices and Queuing (SF)	1,395	2,700	✗	3,582	✗
Non-Public Space					
Airport Administration (SF)	3,288	7,268	✗	7,793	✗
TSA Offices (SF)	2,284	2,801	✗	2,801	✗
Modified FIS Facility (SF)	-	-	✗	20,000	✗
Circulation (SF)	2,170	2,183	✗	2,780	✗
Airport Operations (SF)	3,447	4,313	✗	5,933	✗
Building Systems (SF)	28,703	30,918	✗	47,344	✗
TOTAL GROSS (SF)	115,795	139,815		211,729	

FAR Terminal Concept Development Themes



Relocating concessions to post-security to enhance revenue generating opportunities

Provide additional queue space for Security Screening Checkpoint

Increase size of ticketing area to accommodate additional ticket counter space, infrastructure updates, and queuing area

Enhancing the passenger experience at FAR by preserving flexible support space that can be used for lounges, sensory rooms, coat check, etc.

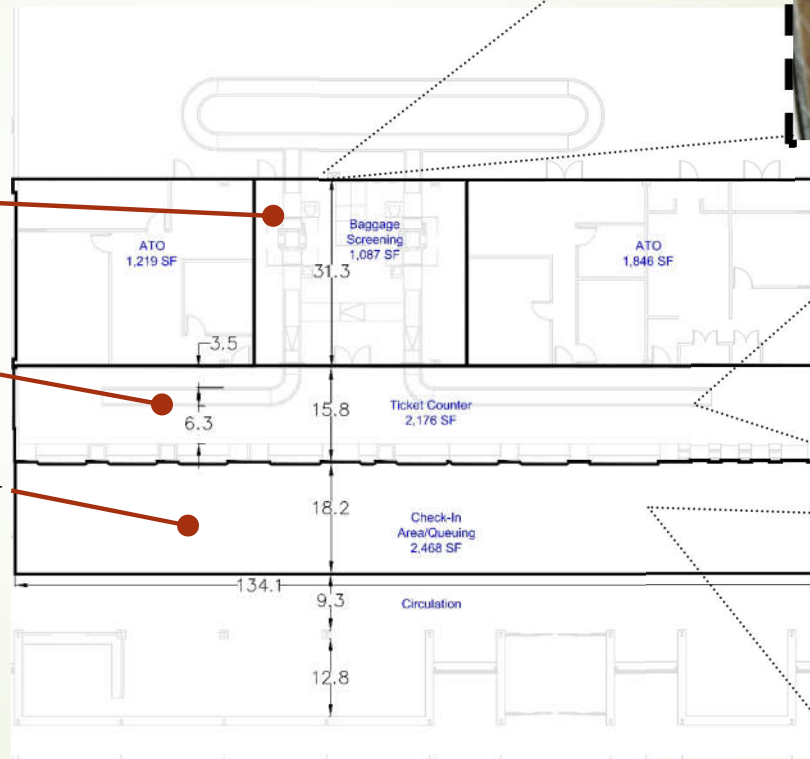
Enhance baggage make-up area for baggage and cart circulation to increase efficiency and safety



Check-In Area Alternatives

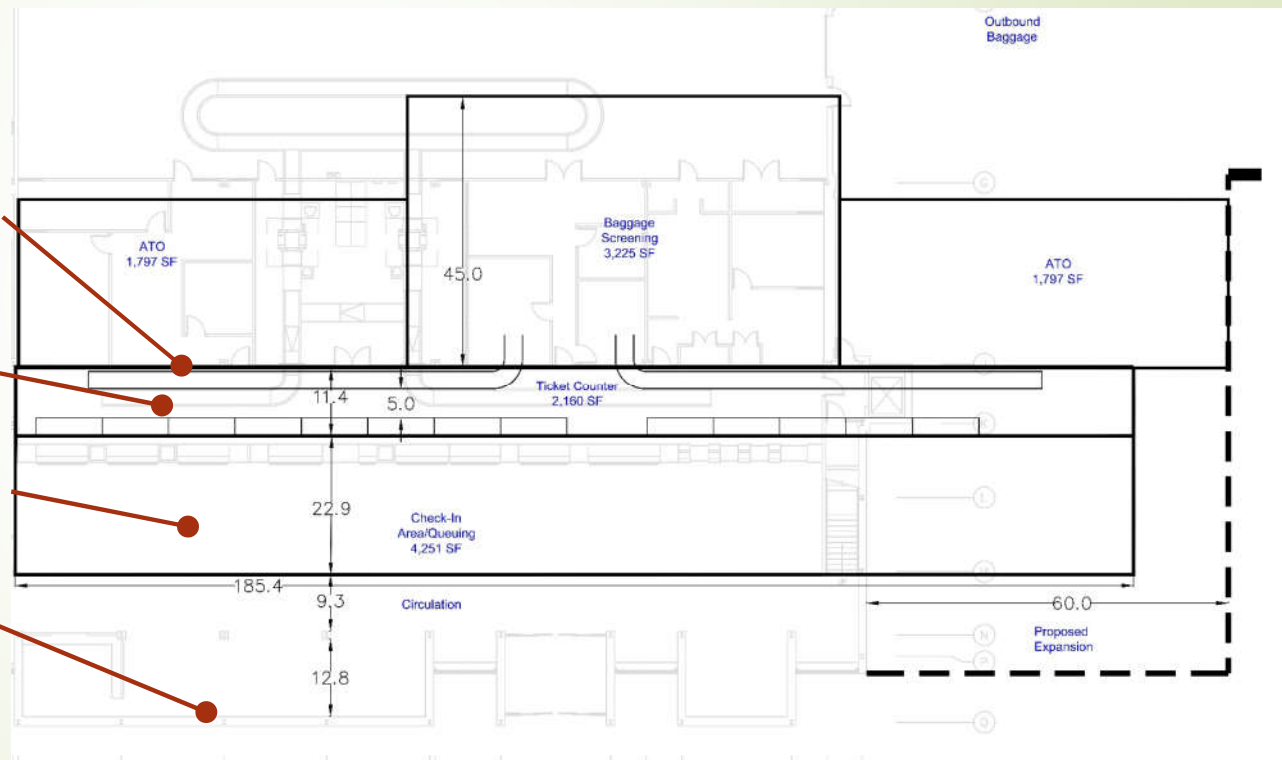
Existing Conditions

- 1 Baggage screening room has insufficient depth
- 2 Excessive space for ticket processing and baggage system
- 3 Queuing depth insufficient



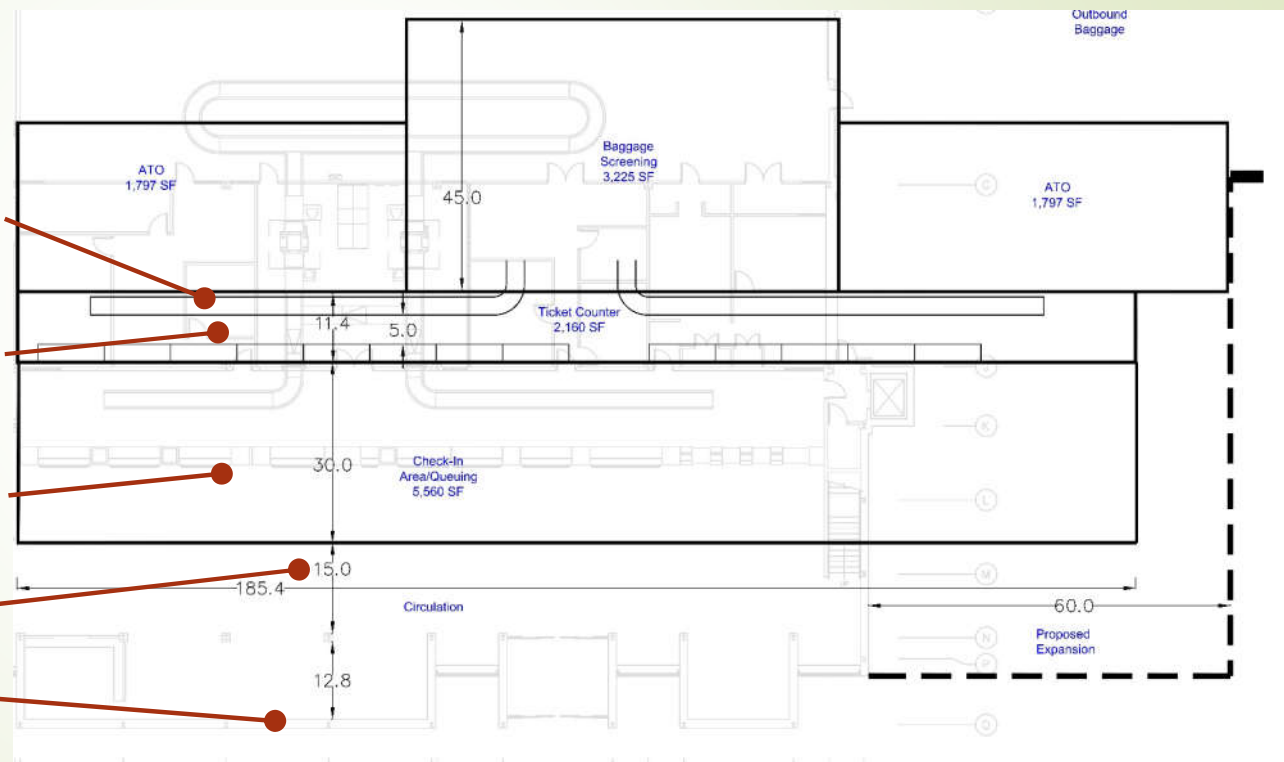
Alternative 1- Optimize Existing Space

- 1 Maintain wall between ticket counters and airline ticket offices
- 2 Relocate ticket counters and baggage line $\pm 5'$ to north
- 3 Add $\pm 5'$ of queuing depth
- 4 Maintain front façade alignment



Alternative 2- Expand Existing Ticketing Area

- 1 Relocates wall between ticket counters and airline ticket offices $\pm 13'$ to the north
- 2 Optimize space between ticket counters and baggage system
- 3 Add $\pm 7'$ of queuing depth
- 4 Add $\pm 6'$ of additional circulation
- 5 Maintain front façade alignment



Check-In Area Alternative Evaluation

Evaluation Criteria	Alternatives	
	1	2
Targets long term goals	✓	✓
Ease of phasing of additions through time	✓	
Minimum construction impact to maintain operations	✓	
Improves queuing	✓	✓
Improves passenger circulation		✓
Adaptable to industry trends for ticketing areas such as two-step bag drop or common-use	✓	✓



Security Screening Checkpoint and Concourse Alternatives

Existing Conditions

1 Passenger flow congestion with SSCP reconciliation area

2 Circulation corridor insufficient in width and separates departure lounge from passenger boarding bridge door

Security Screening Checkpoint

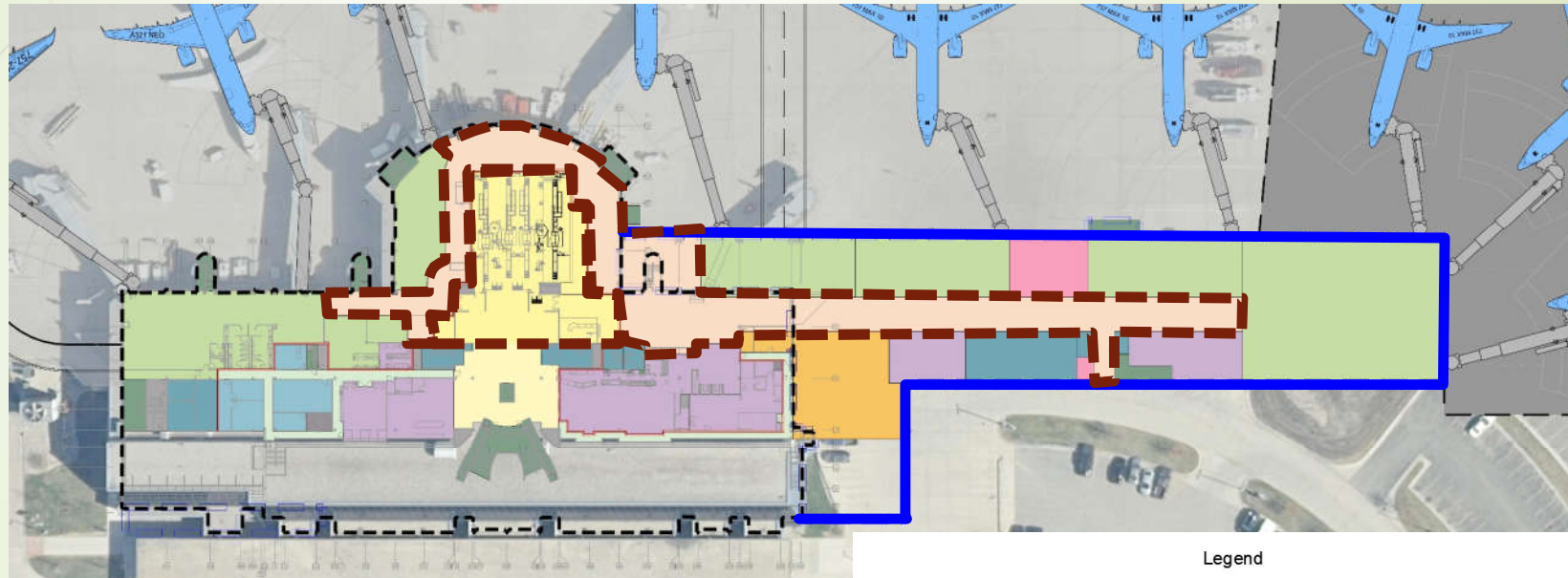
Secure Circulation

3 SSCP queuing area insufficient and backs up to escalators

4 SSCP divides the terminal



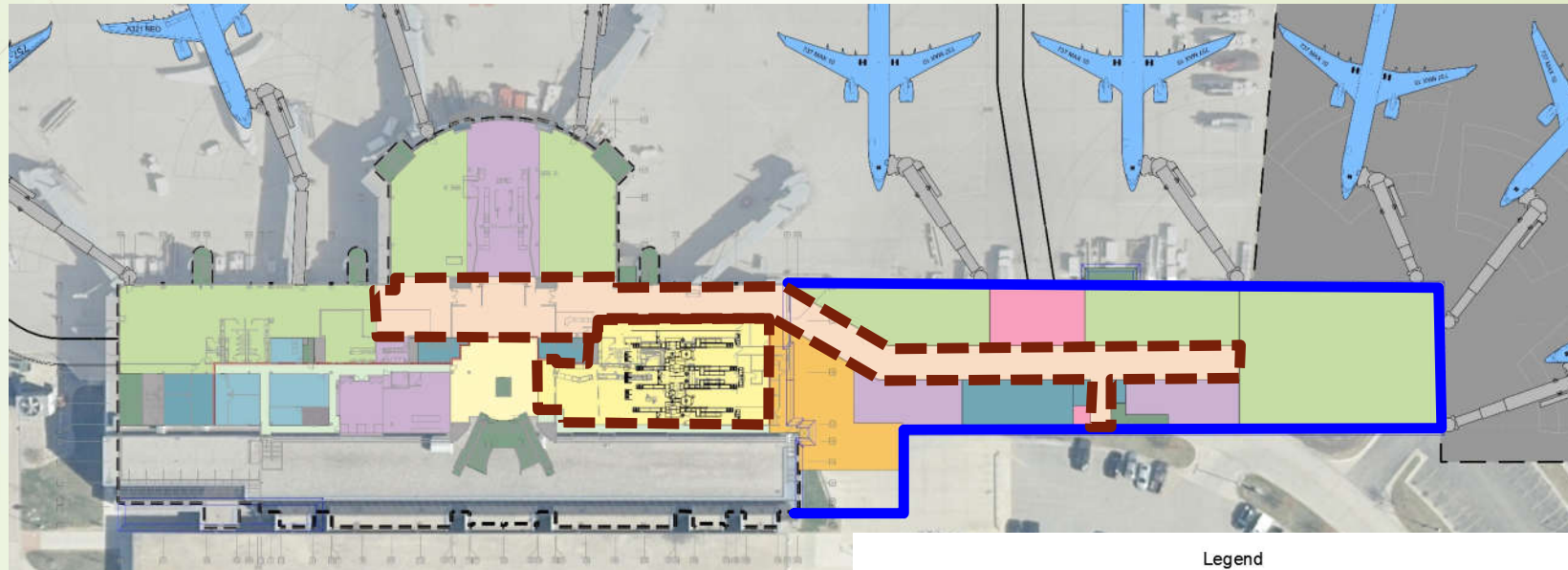
Alternative 1 – SSCP Remains



- Security Screening Checkpoint (SSCP) remains
- Existing pre-secure concessions become post-secure
- Circulation corridor moves behind all existing gates
- Existing gate 1 and 2 relocates to new expansion

Legend	
Public Circulation	Airport Admin Offices
TSA Offices	Gate Departure Lounge
Secure Circulation	Concessions
Non-Public Circulation	Building Systems
Security Screening Checkpoint	Vertical Circulation
Public Restrooms	Proposed Terminal Expansion
Non-Public Restrooms	Existing Terminal
Airport Support Facilities	

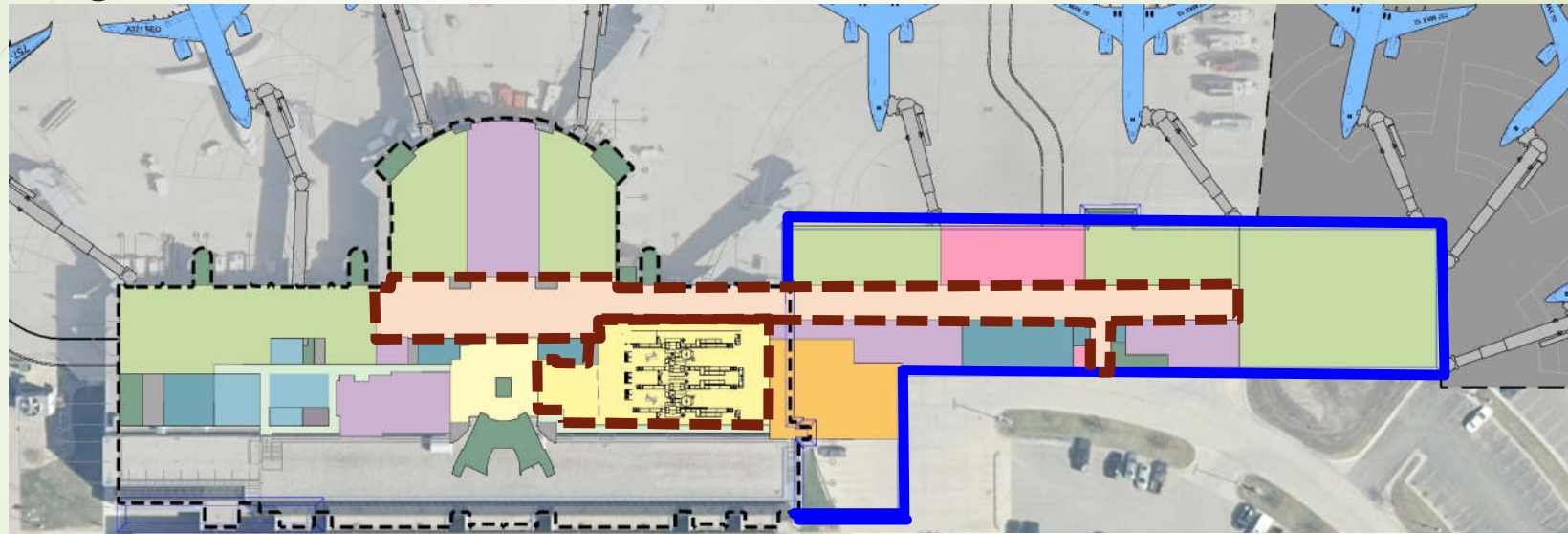
Alternative 2 – SSCP Relocates



- SSCP relocates to existing pre-secure concessions space
- Existing SSCP space becomes concessions and departure lounge space
- Circulation corridor moves behind all existing gates
- Proposed expansion remains in alignment with north face of existing terminal
- Gate 1 relocates to new expansion

Legend	
Public Circulation	Airport Admin Offices
TSA Offices	Gate Departure Lounge
Secure Circulation	Concessions
Non-Public Circulation	Building Systems
Security Screening Checkpoint	Vertical Circulation
Public Restrooms	Proposed Terminal Expansion
Non-Public Restrooms	Existing Terminal
Airport Support Facilities	

Alternative 3 – SSCP Relocates, Straight Circulation Alignment

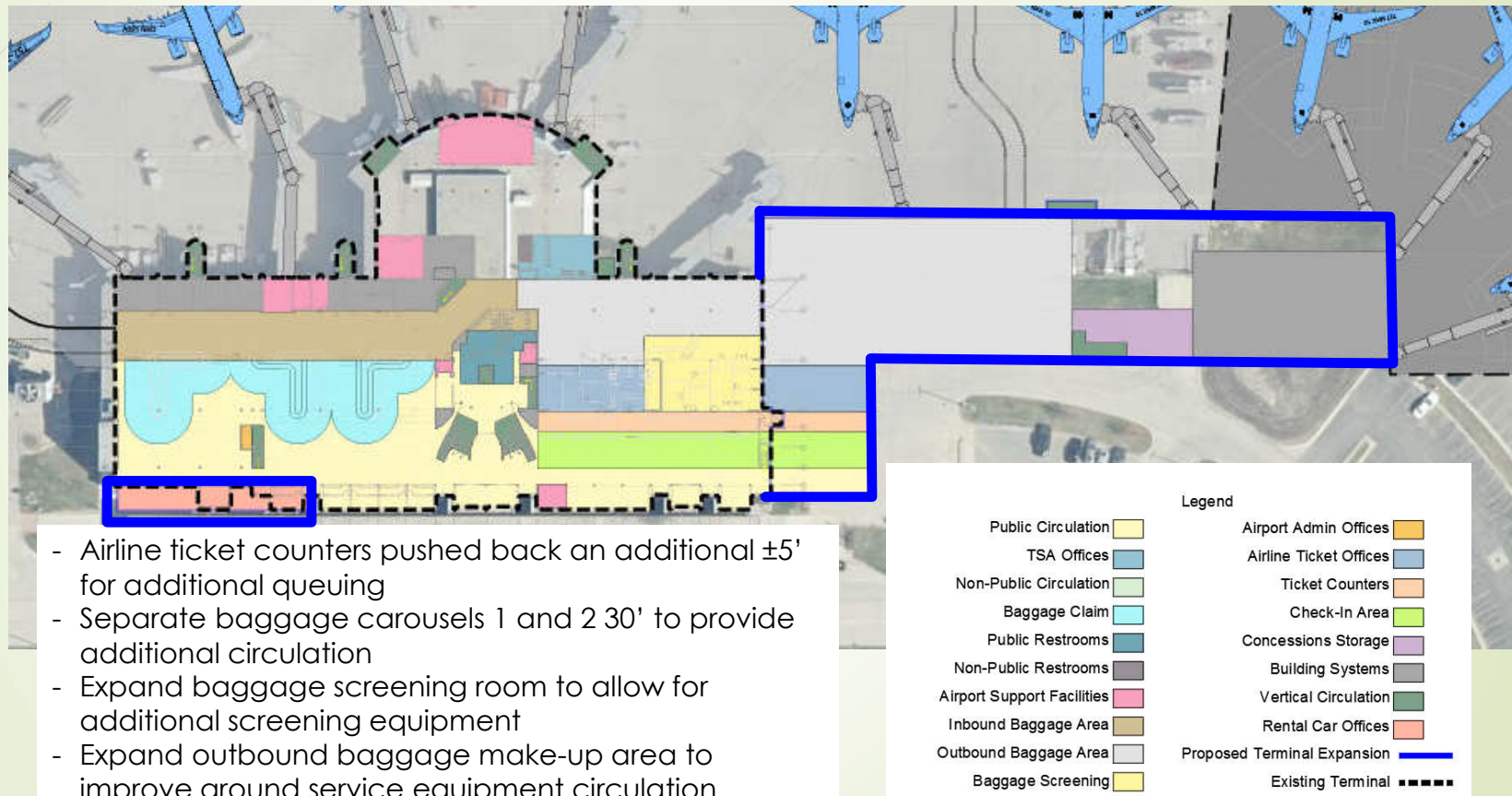


- SSCP relocates to existing pre-secure concessions space
- Existing SSCP space becomes concessions and departure lounge space
- Circulation corridor moves behind all existing gates and in a straight alignment throughout existing and new concourse
- Gate 1 relocates to new expansion

Legend

Public Circulation	Yellow	Airport Admin Offices	Orange
TSA Offices	Light Blue	Gate Departure Lounge	Light Green
Secure Circulation	Dark Red	Concessions	Purple
Non-Public Circulation	Light Green	Building Systems	Grey
Security Screening Checkpoint	Dark Red	Vertical Circulation	Dark Green
Public Restrooms	Blue	Proposed Terminal Expansion	Blue Outline
Non-Public Restrooms	Dark Grey	Existing Terminal	Dashed Line
Airport Support Facilities	Pink		

Preferred Lower-Level Alternative

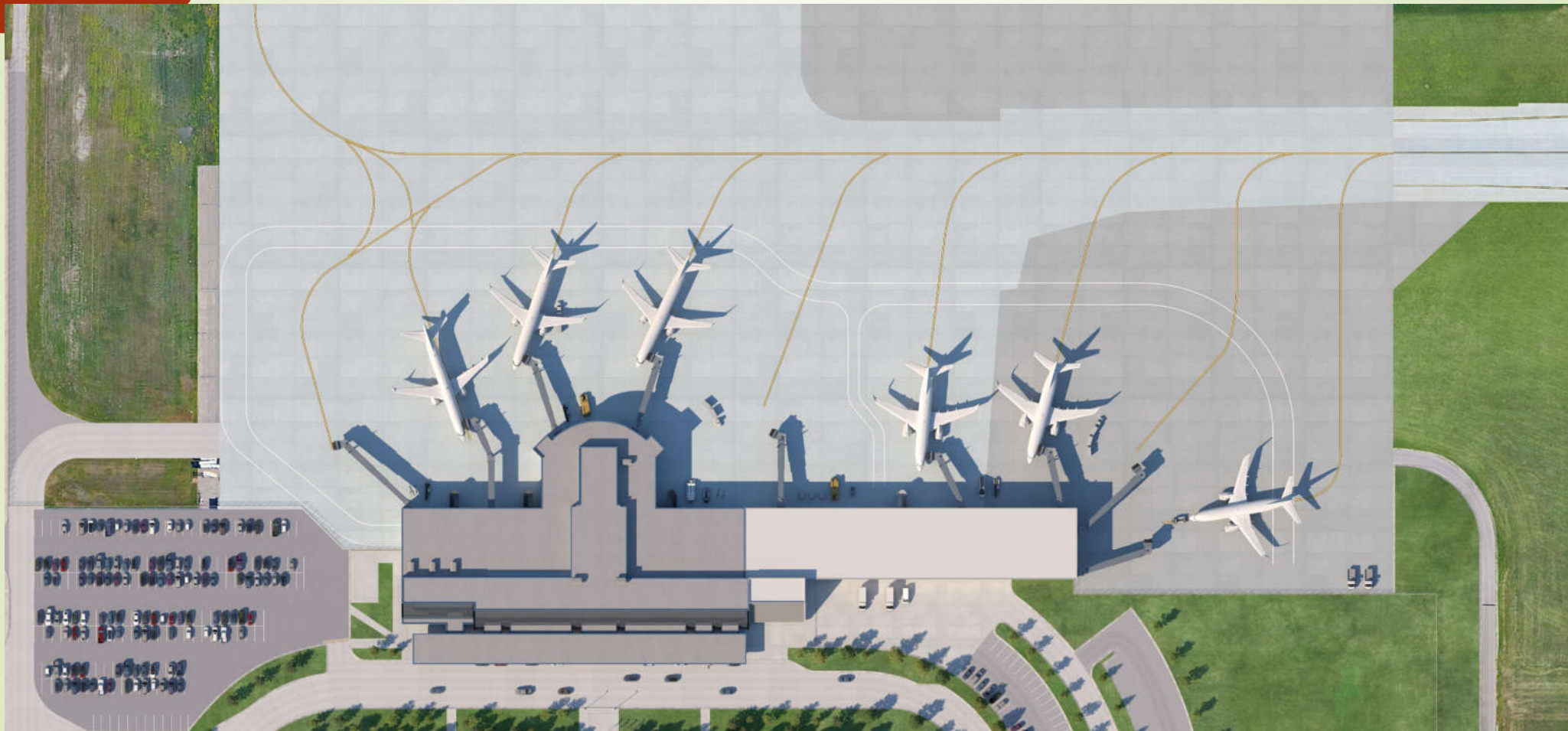


- Airline ticket counters pushed back an additional $\pm 5'$ for additional queuing
- Separate baggage carousels 1 and 2 30' to provide additional circulation
- Expand baggage screening room to allow for additional screening equipment
- Expand outbound baggage make-up area to improve ground service equipment circulation
- Relocate rental counters to allow for queuing and larger offices

Alternative 1 Plan



Alternative 2 Plan



Alternative 3 Plan



Alternative 1 – Looking Northwest



Alternative 2 – Looking Northwest



Alternative 3 – Looking Northwest



Alternative 1 – Looking Southwest



Alternative 2 – Looking Southwest



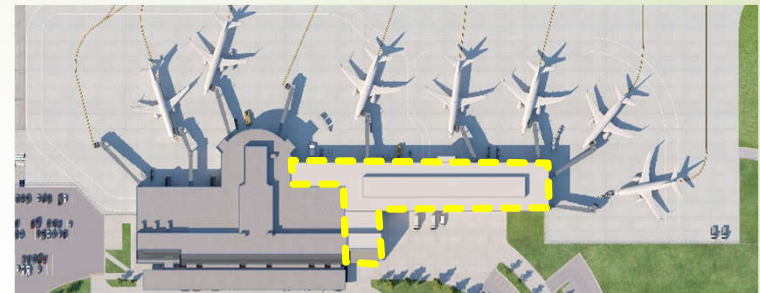
Alternative 3 – Looking Southwest



SSCP/Concourse Alternative Evaluation

1

- Security Screening Checkpoint (SSCP) remains
- Existing pre-secure concessions become post-secure
- Circulation corridor moves behind all existing gates
- Gate 1 and 2 relocates to new expansion



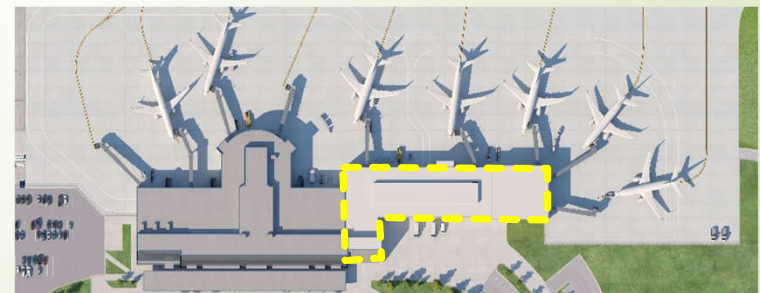
2

- SSCP relocates to existing pre-secure concessions space
- Existing SSCP space becomes concessions and departure lounge space
- Circulation corridor moves behind all existing gates
- Proposed expansion remains in alignment with north face of existing terminal
- Gate 1 relocates to new expansion



3

- SSCP relocates to existing pre-secure concessions space
- Existing SSCP space becomes concessions and departure lounge space
- Circulation corridor moves behind all existing gates and in a straight alignment throughout existing and new concourse
- Gate 1 relocates to new expansion



SSCP/Concourse Alternative Evaluation

Evaluation Criteria	Alternatives		
	1	2	3
Concourse			
New construction maintains some current gates	✓	✓	✓
Creates opportunity to expand concession operations	✓	✓	✓
Creates opportunity to improve passenger experience with flexible space	✓	✓	✓
Allows for future expansion	✓	✓	✓
Proposed expansion maintains existing façade alignment on north face of concourse		✓	
Departure lounges sufficient in size		✓	✓
TSA Security Checkpoint			
Configuration allows maximum passenger flow through TSA checkpoint		✓	✓
Provides adequate queueing for SSCP		✓	✓
Relocates current TSA offices	✓	✓	✓
Allows for future expansion		✓	✓
Exit lane separates deplaning passengers from enplaning passengers		✓	✓
Provides adequate recompose area		✓	✓
Long queuing lines will avoid backing-up on vertical circulation		✓	✓
Secure Circulation			
Circulation maximizes straight alignments throughout existing and new concourse			✓
Ease of wayfinding		✓	✓
Adequate space for meet/greeter	✓	✓	✓
Circulation separates deplaning passengers from enplaning passengers		✓	✓
General Considerations			
Minimal impact to landside dock operations and parking	✓		✓
Improves ground service equipment maneuverability and baggage operations	✓	✓	✓
Targets long term goals		✓	✓
Ease of phasing of additions through time		✓	
Minimum construction impact to maintain operations		✓	✓

Rough Order of Magnitude Costs

CONCEPT 1: Terminal Building Improvements

Description	Cost per SF/Equip	SF/ Number	Cost	AIP	Sponsor	TSA	AIP Share	Sponsor Share	TSA Share
Concept 1 Subtotal		195,553	84,660,761				\$ 60,447,875	\$ 24,212,887	\$ -
Owner's Project Contingency		20%	\$ 16,932,152	40%	60%	0%	\$ 6,772,861	\$ 10,159,291	
Soft Costs- (Design and Contract Administration)		17.0%	\$ 14,392,329	40.0%	60%	0%	\$ 5,756,932	\$ 8,635,398	
Cost Adjustment to 2024 bid		4.0%	\$ 3,386,430	40.0%	60%	0%	\$ 1,354,572	\$ 2,031,858	
Asbestos Remediation Allowance (\$2/SF)									
Concept 1 with Contingency Subtotal							\$ 13,884,365	\$ 20,826,547	\$ -
Total Concept 1 Project Cost							\$ 74,332,239	\$ 45,039,434	\$ -

CONCEPT 1 TOTAL \$ 119,371,673

CONCEPT 2: Terminal Building Improvements

Description	Cost per SF/Equip	SF/ Number	Cost	AIP	Sponsor	TSA	AIP Share	Sponsor Share	TSA Share
Concept 2 Subtotal		185,985	80,202,545				\$ 57,380,621	\$ 22,821,925	\$ -
Owner's Project Contingency		20%	\$ 16,040,509	40%	60%	0%	\$ 6,416,204	\$ 9,624,305	
Soft Costs* (Does not include previously contracted design fee)		17.0%	\$ 13,634,433	40.0%	60%	0%	\$ 5,453,773	\$ 8,180,660	
Cost Adjustment to 2024 bid		4.0%	\$ 3,208,102	40.0%	60%	0%	\$ 1,283,241	\$ 1,924,861	
Asbestos Remediation Allowance (\$2/SF)									
Concept 2 with Contingency Subtotal							\$ 13,153,217	\$ 19,729,826	\$ -
Total Concept 2 Project Cost							\$ 70,533,838	\$ 42,551,751	\$ -

CONCEPT 2 TOTAL \$ 113,085,588

CONCEPT 3: Terminal Building Improvements

Description	Cost per SF/Equip	SF/ Number	Cost	AIP	Sponsor	TSA	AIP Share	Sponsor Share	TSA Share
Concept 3 Subtotal		190,106	81,624,047				\$ 58,143,641	\$ 23,480,407	\$ -
Owner's Project Contingency		20%	\$ 16,324,809	40%	60%	0%	\$ 6,529,924	\$ 9,794,886	
Soft Costs* (Does not include previously contracted design fee)		17.0%	\$ 13,876,088	40.0%	60%	0%	\$ 5,550,435	\$ 8,325,653	
Cost Adjustment to 2024 bid		4.0%	\$ 3,264,962	40.0%	60%	0%	\$ 1,305,985	\$ 1,958,977	
Asbestos Remediation Allowance (\$2/SF)									
Concept 3 with Contingency Subtotal							\$ 13,386,344	\$ 20,079,516	\$ -
Total Concept 3 Project Cost							\$ 71,529,984	\$ 43,559,922	\$ -

CONCEPT 3 TOTAL \$ 115,089,906



Mead
& Hunt

Recommended Alternative – Alternative 3



Recommended Alternative – Alternative 3





Next Steps

Four
month
process

- Refine Preferred Concept
- Financial Feasibility
- Public Information Session
- FAA Meeting- AIP Eligibility Review Meeting (September 2022*)

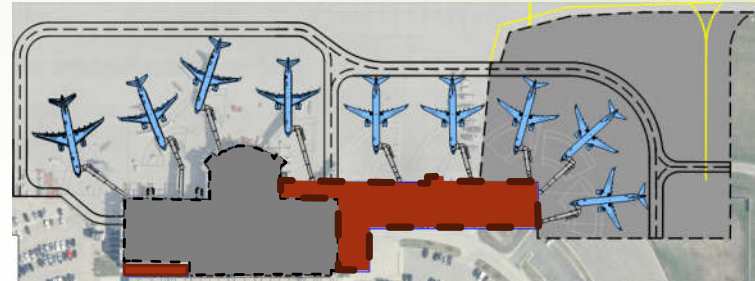


Back-Up Slides

SSCP/Concourse Alternative Evaluation

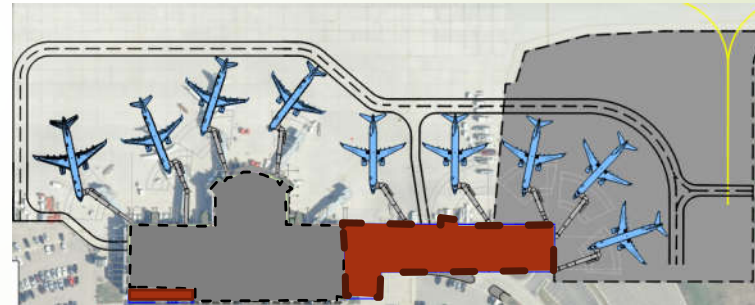
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